

REMARKS/ARGUMENTS

This Amendment and Response is in reply to the Office Action dated February 18, 2005. A three (3) month extension of time is enclosed herewith. Therefore, the time period for reply extends up to and includes August 18, 2005. Applicant wishes to thank the Examiner for his careful review and consideration of the present application.

Applicant has amended the title and claims 1, 12, 15, and 21 above. Claims 1-21 remain pending in the application. No new matter has been added and the amendments to the claims are fully supported by the specification, claims and drawings as originally filed (e.g., see Figs. 3 and 5a).

In the subject Action, the Examiner rejected claims 1-21 as being unpatentable over U.S. Pat. No. 6,327,862 to *Hanes* in view of U.S. Patent No. 4,711,650 to *Faria et al.* Applicant respectfully traverses the rejection in view of the above amendments and arguments below.

First, *Faria et al.* relates to a split Stirling cooler. In this type of cooler, separate housings are used for the compressor portion and the cold-finger/expander. The components are connected with a pressure line. It is noted that *Faria et al.* mentions (col. 3, lines 25 and 26) that the "... expander housing may be formed from a single piece of metal ...". However, none of the issues and problems relating to constructing a unitary housing for a non-split Stirling cooler are disclosed and/or taught by *Faria et al.* (note for example that the structure of *Faria et al.* has an essentially uniform diameter).

Second, *Hanes* generally discloses a prior art cryocooler which utilizes several different components to form the external housing, in addition to using brazing. *Hanes* does not discuss or recognize the problems relating to constructing the external housing from several components. Instead, *Hanes* generally discloses an improved displacer unit. Therefore, there is no recognition or teaching in either *Faria et al.* or *Hanes* of the problem solved by the present invention. Accordingly, there is no basis for combination of the references -- with the Examiner's combination being hindsight based on Applicant's invention.

Third, the present invention utilizes a non-split Stirling cooler that also includes a heat exchanger. *Faria et al.* does not disclose a unitary housing which includes this limitation. This element is recited in Applicant's independent claims 1, 12, 15, and 18. More specifically, the recitations are: the "unitary housing arranged and configured to house the heat exchanger" (as recited in claim 1); "the second section arranged and configured to substantially house the heat exchanger" (as recited in claim 12); the "substantially seamless housing arranged and configured to support and substantially enclose . . . the heat exchanger" (as recited in claim 15); and the "unitary sealed housing, wherein the housing is arranged and configured to support and enclose at least portion of the . . . heat exchanger" (as recited in claim 18). Further, *Faria et al.* does not disclose how to manufacture a unitary housing as recited in independent claim 21. *Hanes* does not remedy the deficiencies of *Faria et al.*

Fourth, claims 2-11 depend from claim 1, claims 13-14 depend from claim 12, claims 16-17 depend from claim 15, and claims 19-20 depend from claim 18. For at least the reasons set forth above, these dependent claims are also allowable over the art of record. Applicant does not otherwise concede the correctness of the rejection and reserves the right to make additional arguments as may be necessary.

In view of the foregoing, Applicant requests the Examiner's reconsideration and withdrawal of the rejection.

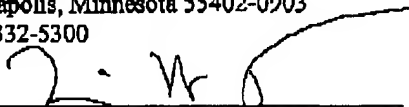
Conclusion

In view of the above amendments and remarks, Applicant respectfully requests a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

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